

Planning and Carrying Out Investigations

Elements of Student Performance

Upper Elementary (3-5)



[Science & Engineering Practice 3](#)

Observable features of the student performance by the end of grade 5:

Identifying the phenomenon under investigation

Identify and describe the phenomenon under investigation.

Identify and describe the purpose of the investigation, which includes a question about the phenomenon.

Identifying the evidence to address this purpose of the investigation

Describe the evidence to be collected in the investigation plan.

Describe how the evidence will address the purpose of the investigation through the relevant crosscutting concept*.

Make predictions about what would happen if a variable changes.

* Investigations may be observational or experimental

Planning the investigation

Describe how the data will be collected, recorded, and organized in the investigation plan*.

Describe the number of trials in the investigation plan.

Describe how variables will be controlled to ensure a fair test.

*investigation plan may be teacher-given or collaboratively developed depending on the standard

Collecting the data

Collect, record, and organize data based on the investigation plan.

[3-PS2-1](#) / [3-PS2-2](#) / [4-PS3-2](#) / [4-ESS2-1](#) / [5-PS1-3](#) / [5-PS1-4](#)

Next Generation Science Standards is a registered trademark of Achieve. Neither Achieve nor the lead states and partners that developed the Next Generation Science Standards were involved in the production of this product, and do not endorse it. [Visit the official NGSS website.](#)



www.thewonderofscience.com CC BY-NC-SA 4.0

[Google Doc Link](#)